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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/266,253	UJIIE ET AL.	
	Examiner	Art Unit	
	Dorothy Wu	2697	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-53 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-53 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claim 16 objected to because of the following informalities: the claim recites the reference character "15" for the image sensing apparatus as a limitation. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 9, 15-22, 33-35, 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al, U.S. Patent 5,136,320, in view of Prentice et al, U.S. Pub. No. 2003/0030729.

Regarding claim 1, Kobayashi et al teaches an image sensing apparatus (col. 1, line 12) comprising: a driving device (zoom motor **10**) that moves an image sensing optical system (zoom lens **11**) to image sensing and non image sensing regions (col. 9, lines 13-18, 43-49). Kobayashi et al also teaches the judging of the state (main switch **30** states SWL, SWM, SWZ) of the image sensing apparatus and the movement of the lens in accordance with the state, which reads on the driving of said driving device in accordance with the judgment of the state (col. 16, line 38-col. 17, line 24). The determination device for judging the state of the image sensing

apparatus is inherently taught. Kobayashi et al teaches that the lens is driven to an image sensing region in an image sensing state (macro SWM) (col. 16, lines 53-64).

Kobayashi et al does not teach that the lens is driven to a predetermined position in an external control state. Prentice et al teach that when the camera **10** is connected to a host computer **12**, an application runs on the computer to control the image sensing operation [0024]. It would have been obvious to one of ordinary skill to position the lens in an image sensing region when capturing images. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus that moves the optical system in accordance with the state of the apparatus taught by Kobayashi et al with the practice of remotely controlling a camera via computer taught by Prentice et al to make an apparatus that drives the optical system in accordance with whether the apparatus is in an image sensing or external control state. One of ordinary skill would have been motivated to make such a modification to move the optical system to the predetermined location associated with the apparatus's selected function.

Regarding claim 50, because the apparatus of claim 1 is taught, the control method corresponding to the apparatus is also taught.

Regarding claim 2, Prentice et al teaches that when a camera is connected to a computer, the computer controls the camera to execute image sensing, which reads on the external control state [0024]. It would have been obvious to one of ordinary skill to move the optical system to the image sensing region when capturing images.

Regarding claim 3, Prentice et al teaches that the host computer **12** instructs camera **10** when to take images [0024], which reads on an external control state in which the external

controller unit (host computer **12**) transmits an image sensing signal to the camera **10**. It would have been obvious to one of ordinary skill to move the optical system to the image sensing region when capturing images.

Regarding claim 9, Prentice et al teaches that the host computer **12** instructs the camera **10** when to take motion pictures [0024]. It would have been obvious to one of ordinary skill to drive the optical system to and within the image sensing region in response to a completion of an image sensing apparatus to effect focus for the next motion image to be captured.

Regarding claim 15, Kobayashi et al teaches that the non image sensing region includes a position where said optical system is stored (col. 9, lines 15-18).

Regarding claim 16, Kobayashi et al teaches that the non image sensing region includes a predetermined position where the optical system is collapsed in a body of said image sensing apparatus (col. 9, lines 15-16, and Fig. 3)

Regarding claim 17, Prentice et al teaches that a computer may control the camera, which reads on an external control state in which an external computer controls the camera [0024].

Regarding claim 18, Kobayashi et al teaches that said driving device includes a motor (zoom motor **10**) (col. 9, lines 43-49).

Regarding claim 19, Kobayashi et al teaches an image sensing apparatus (col. 1, line 12) comprising: a driving device (zoom motor **10**) that moves a photographing optical system (zoom lens **11**) to photographing and non photographing regions (col. 9, lines 13-18, 43-49). Kobayashi et al also teaches the judging of the state (main switch **30** states SWL, SWM, SWZ) of the image sensing apparatus and the movement of the lens in accordance with the state, which reads on the

driving of said driving device in accordance with the judgment of the state (col. 16, line 38-col. 17, line 24). The determination device for judging the state of the image sensing apparatus is inherently taught. Kobayashi et al teaches that the lens is driven to a photographing region in a photographing state (macro SWM) (col. 16, lines 53-64).

Kobayashi et al does not teach that the lens is driven to a predetermined position in an external control state. Prentice et al teach that when the camera **10** is connected to a host computer **12**, an application runs on the computer to control the image sensing operation [0024]. It would have been obvious to one of ordinary skill to position the lens in a photographing region when capturing images. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus that moves the optical system in accordance with the state of the apparatus taught by Kobayashi et al with the practice of remotely controlling a camera via computer taught by Prentice et al to make an apparatus that drives the optical system in accordance with whether the apparatus is in a photographing or external control state. One of ordinary skill would have been motivated to make such a modification to move the optical system to the predetermined location associated with the apparatus's selected function.

Regarding claim 20, Kobayashi et al teaches an image sensing apparatus (col. 1, line 12) comprising: a driving device (zoom motor **10**) that moves an image sensing optical system (zoom lens **11**) in extending and retracting directions (col. 9, lines 43-49). Kobayashi et al also teaches the judging of the state (main switch **30** states SWL, SWM, SWZ) of the image sensing apparatus and the movement of the lens in accordance with the state, which reads on the driving of said driving device in accordance with the judgment of the state (col. 16, line 38-col. 17, line 24). The determination device for judging the state of the image sensing apparatus is inherently

taught. Kobayashi et al teaches that the lens is extended to a predetermined position in an image sensing state (macro SWM) (col. 16, lines 53-64).

Kobayashi et al does not teach that the lens is driven to a predetermined position in an external control state. Prentice et al teach that when the camera **10** is connected to a host computer **12**, an application runs on the computer to control the image sensing operation [0024]. It would have been obvious to one of ordinary skill to extend the lens out of the camera body when capturing images. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus that judges the state of the apparatus and moves the image sensing optical system accordingly taught by Kobayashi et al with the practice of connecting a camera to a computer to control the camera remotely taught by Prentice et al to make an apparatus that extends or retracts the optical system in accordance with the image sensing or external control state. One of ordinary skill would have been motivated to make such a modification to move the optical system to the predetermined location associated with the apparatus's selected function.

Regarding claim 51, because the apparatus of claim 20 is taught, the control method corresponding to the apparatus is also taught.

Regarding claim 21, Prentice et al teaches that when a camera is connected to a computer, the computer controls the camera to effect image sensing, which reads on the external control state [0024]. It would have been obvious to one of ordinary skill to extend the image sensing optical system out from the camera body when capturing images.

Regarding claim 22, Prentice et al teaches that the external control unit (host computer **12**) instructs camera **10** when to take images [0024], which reads on an external state in which

the external controller unit transmits an image sensing signal to the camera **10**. It would have been obvious to one of ordinary skill to extend image sensing optical system out from the camera body when capturing images.

Regarding claim 33, Prentice et al teaches that a computer may control the camera, which reads on an external control state [0024].

Regarding claim 34, Kobayashi et al teaches that said driving device includes a motor (zoom motor **10**) (col. 9, lines 43-49).

Regarding claim 35, Kobayashi et al teaches an image sensing apparatus (col. 1, line 12) comprising: a driving device (zoom motor **10**) that moves a photographing optical system (zoom lens **11**) in extending and retracting directions (col. 9, lines 43-49). Kobayashi et al also teaches the judging of the state (main switch **30** states SWL, SWM, SWZ) of the image sensing apparatus and the movement of the lens in accordance with the state, which reads on the driving of said driving device in accordance with the judgment of the state (col. 16, line 38-col. 17, line 24). The determination device for judging the state of the image sensing apparatus is inherently taught. Kobayashi et al teaches that the lens is extended to a predetermined position in an image sensing state (macro SWM) (col. 16, lines 53-64).

Kobayashi et al does not teach that the lens is driven to a predetermined position in an external control state. Prentice et al teach that when the camera **10** is connected to a host computer **12**, an application runs on the computer to control the image sensing operation [0024]. It would have been obvious to one of ordinary skill to extend the lens out of the camera body when capturing images. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus that judges the state of the

apparatus and moves the image sensing optical system accordingly taught by Kobayashi et al with the practice of connecting a camera to a computer to control the camera remotely taught by Prentice et al to make an apparatus that extends or retracts the optical system in accordance with the image sensing or external control state. One of ordinary skill would have been motivated to make such a modification to move the optical system to the predetermined location associated with the apparatus's selected function.

3. Claims 4, 5, 6, 10, 11, 23, 24, 25, 27, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al, U.S. Patent 5,136,320, in view of Prentice et al, U.S. Pub. No. 2003/0030729, and further in view of Takahashi, U.S. Patent 5,210,567.

Regarding claim 4, Kobayashi in view of Prentice teach the apparatus of claim 3. See above. Kobayashi in view of Prentice do not teach the driving of said optical system to the non image sensing region in response to a completion of an image sensing operation. Takahashi teaches the retraction of a lens to a rest position a predetermined time period after an image capture (col. 2, lines 40-52), which reads on the driving of an optical system to a non image sensing region in response to a completion of an image sensing operation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Kobayashi in view of Prentice with the practice of positioning the optical system in the non image sensing region following the completion of an image capture taught by Takahashi to make an apparatus that retracts the lens once image capture has been completed. One of ordinary skill would have been motivated to make such a modification to protect the lens when not in use.

Regarding claims 5 and 10, Kobayashi in view of Prentice teach the apparatus of claim 3. See above. Kobayashi in view of Prentice do not teach a timer for causing said driving device to drive said image sensing optical system to the non image sensing region a predetermined time period after a completion of an image sensing operation. Takahashi teaches the retraction of a lens to a rest position a predetermined time period after an image capture (col. 2, lines 40-52). The timer is inherently taught. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Kobayashi in view of Prentice with the technique of Takahashi to make an image sensing apparatus with a timer that retracts the lens to a non image sensing position once a predetermined time period following an image capture has elapsed, whether the apparatus is in the external control state or not. One of ordinary skill would have been motivated to make such a modification to protect the lens when not in use.

Regarding claims 6 and 11, Takahashi teaches the retraction of lens to a rest position after the elapse of a predetermined time period following the last image capture (col. 2, lines 40-52). It would have been obvious to one of ordinary skill that if another image is captured before the predetermined time period elapses, the timer resets in accordance with the most recent image captured, and the lens would remain in the extended position.

Regarding claim 23, Kobayashi in view of Prentice teach the apparatus of claim 22. See above. Kobayashi in view of Prentice do not teach the retraction of optical system in response to a completion of an image sensing operation. Takahashi does teach the retraction of a camera lens a predetermined time period after an image capture (col. 2, lines 40-52), which reads on the retraction of the lens in response to a completion of an image sensing operation. Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Kobayashi in view of Prentice with the practice of retracting the optical system following the completion of an image capture taught by Takahashi to make an apparatus that retracts the lens after image capture has been completed. One of ordinary skill would have been motivated to make such a modification to protect the lens when not in use.

Regarding claim 24, Kobayashi in view of Prentice teach the apparatus of claim 22. See above. Kobayashi in view of Prentice do not teach a timer for causing the retraction of said optical system a predetermined time period after an image capture. Takahashi teaches the retraction of a camera lens a predetermined time period after an image capture (col. 5, lines 23-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Kobayashi in view of Prentice with the technique of Takahashi to make an image sensing apparatus that retracts the lens after a predetermined time period following an image capture has elapsed. One of ordinary skill would have been motivated to make such a modification to protect the lens when not in use.

Regarding claim 25, Takahashi teaches the retraction of lens to a rest position after the elapse of a predetermined time period following the last image capture (col. 5, lines 23-28). It would have been obvious to one of ordinary skill that if another image is captured before the predetermined time period elapses, the timer resets in accordance with the most recent image captured, and the lens would remain in the extended position.

Regarding claim 27, Kobayashi in view of Prentice teach the apparatus of claim 20. See above. Kobayashi in view of Prentice do not teach the retracting of said optical system in response to a completion of an image sensing operation. Takahashi does teach the retraction of a

camera lens a predetermined time period after an image capture (abstract; col. 5, lines 23-28), which reads the retraction of an optical system in response to a completion of an image sensing operation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Kobayashi in view of Prentice with the practice of retracting the optical system following the completion of an image capture taught by Takahashi to make an apparatus that retracts the lens after image capture has been completed, whether the camera is in an external control state or not. One of ordinary skill would have been motivated to make such a modification to protect the lens when not in use.

Regarding claim 28, Kobayashi in view of Prentice teach the apparatus of claim 22. See above. Kobayashi in view of Prentice do not teach a timer for causing the optical system to be retracted a predetermined time period after a completion of an image sensing operation when the apparatus is in the external control state. Takahashi teaches the retraction of a camera lens a predetermined time period after an image capture (col. 5, lines 23-28). The timer is inherently taught. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus of Kobayashi in view of Prentice with the technique of Takahashi to make an image sensing apparatus with a timer that retracts the lens once a predetermined time period following an image capture has elapsed. One of ordinary skill would have been motivated to make such a modification to protect the lens when not in use.

Regarding claim 29, Takahashi teaches the retraction of lens to a rest position after the elapse of a predetermined time period following the last image capture (col. 5, lines 23-28). It would have been obvious to one of ordinary skill that if another image is captured before the

predetermined time period elapses, the timer resets in accordance with the most recent image captured, and the lens would remain in the extended position.

4. Claims 7-8, 12-14, 26, 30-32, 36-49, 52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al, U.S. Patent 5,136,320, in view of Prentice et al, U.S. Pub. No. 2003/0030729, and further in view of Hashimoto et al, U.S. Patent 6,344,875.

Regarding claims 7 and 8, Kobayashi in view of Prentice teach the apparatus according to claim 1. See above. Kobayashi teaches that the image sensing optical system is positioned in a non image sensing region during a non image sensing state, which reads on the prevention of the optical system from being driven to the image sensing state (col. 16, lines 38-50). Prentice et al teaches a digital camera with a memory for storing digital images [0022]. Kobayashi in view of Prentice do not teach that the image sensing optical system is in the non image sensing region when the apparatus is in the external control state. Hashimoto teaches that when the camera is controlled by a computer, it is limited to transmitting and receiving images, which reads on non image sensing states (col. 10, lines 30-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the practice of positioning optical systems in the non image sensing position when the apparatus is in a non image sensing mode taught by Kobayashi in view of Prentice with the use of non image external control states taught by Hashimoto to make an apparatus that positions the optical system in the non image sensing region when the camera is transmitting or receiving images in the external control state. One of ordinary skill would have been motivated to make such a modification to safeguard the lens when it is not in use.

Regarding claim 12, Kobayashi in view of Prentice teach the apparatus according to claim 1. See above. Kobayashi teaches that the image sensing optical system is positioned in a non image sensing region during a non image sensing state (col. 16, lines 38-50). Kobayashi in view of Prentice do not teach a reproduction state. Hashimoto teaches a state in which to play images, which reads on the reproduction state (col. 10, lines 34-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a non image sensing reproduction state taught by Hashimoto into the apparatus which stores the optical system during non imaging sensing states taught by Kobayashi in view of Prentice to make an apparatus that positions the optical system in the non sensing image region during the reproduction state. One of ordinary skill would have been motivated to make such a modification to safeguard the lens when it is not in use.

Regarding claim 13, Hashimoto teaches an operation device that selectively sets the apparatus into at least either one of the image sensing and external control states, said device being provided on an exterior of said image sensing device (Fig. 13B).

Regarding claim 14, Hashimoto teaches a signal processing device (digital signal processing circuit **11**) that converts an optical image formed by the optical system into an electrical signal for photography (col. 6, lines 50-55).

Regarding claim 26, Kobayashi in view of Prentice teach the apparatus according to claim 20. See above. Kobayashi teaches that the image sensing optical system is positioned in a non image sensing region during a non image sensing state, which reads on the prevention of the optical system being driven in the extending direction (col. 16, lines 38-50). Kobayashi in view of Prentice do not teach that the image sensing optical system is in the non image sensing region

when the apparatus is in the external control state. Hashimoto teaches that when the camera is controlled by a computer, it is limited to transmitting and receiving images, which reads on non image sensing states (col. 10, lines 30-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the practice of positioning optical systems in the non image sensing position when the apparatus is in a non image sensing mode taught by Kobayashi in view of Prentice with the use of non image external control states taught by Hashimoto to make an apparatus that prevents the optical system from being driven in the extended direction when the camera is transmitting or receiving images in the non image sensing external control state. One of ordinary skill would have been motivated to make such a modification to safeguard the lens when it is not in use.

Regarding claim 30, Kobayashi in view of Prentice teach the apparatus according to claim 20. See above. Kobayashi teaches that the image sensing optical system is positioned in a non image sensing region during a non image sensing state, which reads on the prevention of the optical system being driven from the extending direction (col. 16, lines 38-50). Kobayashi in view of Prentice do not teach a reproduction state. Hashimoto teaches a state in which to play images, which reads on the reproduction state (col. 10, lines 34-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a non image sensing reproduction state taught by Hashimoto into the apparatus which stores the optical system during non imaging sensing states taught by Kobayashi in view of Prentice to make an apparatus that prevents the optical system from moving in the extending direction during the reproduction state. One of ordinary skill would have been motivated to make such a modification to safeguard the lens when it is not in use.

Regarding claim 31, Hashimoto teaches an operation device that selectively sets the apparatus into at least either one of the image sensing and external control states, said device being provided on an exterior of said image sensing device (Fig. 13B).

Regarding claim 32, Hashimoto teaches a signal processing device (digital signal processing circuit **11**) that converts an optical image formed by the optical system into an electrical signal for photography (col. 6, lines 50-55).

Regarding claim 36, Kobayashi in view of Prentice teach an apparatus comprising a driving device that moves an image sensing optical system to image sensing and non image sensing regions in accordance with the state of the apparatus, wherein the driving device moves the optical system to the image sensing region in the image sensing state and moves the optical system to the non image sensing region in the non image sensing state. See reasoning for claim 1. Kobayashi in view of Prentice do not teach a non image sensing reproduction state. Hashimoto teaches a state in which to play images, which reads on the reproduction state (col. 10, lines 34-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a non image sensing reproduction state taught by Hashimoto into the apparatus which stores the optical system during non imaging sensing states taught by Kobayashi in view of Prentice to make an apparatus that positions the optical system in the non sensing image region during the reproduction state and positions the optical system in the image sensing region during the image sensing state. One of ordinary skill would have been motivated to make such a modification to expose the lens when it is in use but to safeguard it when it is not in use.

Regarding claim 52, because the apparatus according to claim 36 is taught, the control method corresponding to the apparatus is also taught.

Regarding claim 37, Kobayashi teaches that the optical system is positioned in a non image sensing region in a non image sensing state (col. 16, lines 40-50). Hashimoto teaches a state in which to play images, which reads on a non image sensing reproduction state (col. 10, lines 34-38).

Regarding claim 38, Kobayashi teaches that when the image sensing apparatus is in the image sensing state, the optical system is driven to the image sensing region (col. 16, line 51- col. 17, line 24).

Regarding claim 39, Kobayashi in view of Prentice in view of Hashimoto teach that in the image reproduction state, the optical system is positioned in the non image sensing region. See reasoning for claim 36. As the optical system is positioned in the non image sensing region, it is prevented from being driven in the non image sensing region.

Regarding claim 40, Kobayashi teaches that when the image sensing apparatus is in the image sensing state, the optical system is driven to the image sensing region (col. 16, line 51- col. 17, line 24).

Regarding claim 41, Kobayashi et al teaches that the non image sensing region includes a position where said optical system is stored (col. 9, lines 15-18).

Regarding claim 42, Kobayashi et al teaches that the non image sensing region includes a predetermined position where the optical system is collapsed in a body of said image sensing apparatus (col. 9, lines 15-16, and Fig. 3).

Regarding claim 43, Kobayashi et al teaches that said driving device includes a motor (zoom motor **10**) (col. 9, lines 43-49).

Regarding claim 44, Kobayashi in view of Prentice teach an apparatus comprising a driving device that moves a photographing optical system to photographing and non photographing regions in accordance with the state of the apparatus, wherein the driving device moves the optical system to the photographing region in the image sensing state. See reasoning for claim 19. Kobayashi in view of Prentice teach that the optical system is positioned in a non photographing region in a non photographing state (col. 16, lines 40-50). Kobayashi in view of Prentice do not teach a non photographing reproduction state. Hashimoto teaches a state in which to play images, which reads on a non photographing reproduction state (col. 10, lines 34-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a non photographing reproduction state taught by Hashimoto into the apparatus which stores the optical system during non photographing states taught by Kobayashi in view of Prentice to make an apparatus that positions the optical system in the non photographing region during the reproduction state. One of ordinary skill would have been motivated to make such a modification to safeguard the lens when it is not in use.

Regarding claim 45, Kobayashi in view of Prentice teach an apparatus comprising a driving device that moves an image sensing optical system in extending and retracting directions in accordance with the state of the apparatus, wherein the driving device moves the optical system in the extended direction in the image sensing state. See reasoning for claim 20. Kobayashi in view of Prentice teach that the optical system is retracted to a stored position in a non image sensing state (col. 16, lines 40-50). Kobayashi in view of Prentice do not teach a non

image sensing reproduction state. Hashimoto teaches a state in which to play images, which reads on a non image sensing reproduction state (col. 10, lines 34-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a non image sensing reproduction state taught by Hashimoto into the apparatus which stores the optical system during non imaging sensing states taught by Kobayashi in view of Prentice to make an apparatus that retracts the optical system into the camera body during the reproduction state. One of ordinary skill would have been motivated to make such a modification to safeguard the lens when it is not in use.

Regarding claim 53, because the apparatus according to claim 45 is taught, the control method corresponding to the apparatus is also taught.

Regarding claim 46, Kobayashi in view of Prentice in view of Hashimoto teach that in the image reproduction state, the optical system is positioned in the non image sensing region. See reasoning for claim 36. As the optical system is positioned in the non image sensing region, it is prevented from being driven in the extending direction to the non image sensing region.

Regarding claim 47, Kobayashi teaches that when the image sensing apparatus is in the image sensing state, the optical system is driven in the extending direction to the image sensing region (col. 16, line 51-col. 17, line 24).

Regarding claim 48, Kobayashi et al teaches that said driving device includes a motor (zoom motor **10**) (col. 9, lines 43-49).

Regarding claim 49, Kobayashi in view of Prentice teach an apparatus comprising a driving device that moves a photographing optical system in extending and retracting directions in accordance with the state of the apparatus, wherein the driving device moves the optical

system in the extended direction in the photographing state. See reasoning for claim 20. Kobayashi in view of Prentice teach that the optical system is retracted to a stored position in a non image sensing state (col. 16, lines 40-50). Kobayashi in view of Prentice do not teach a non image sensing reproduction state. Hashimoto teaches a state in which to play images, which reads on a non image sensing reproduction state (col. 10, lines 34-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a non image sensing reproduction state taught by Hashimoto into the apparatus which stores the optical system during non imaging sensing states taught by Kobayashi in view of Prentice to make an apparatus that retracts the optical system into the camera body during the reproduction state. One of ordinary skill would have been motivated to make such a modification to safeguard the lens when it is not in use.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dorothy Wu whose telephone number is 703-305-8412. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on 703-308-7644.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)306-0377.

Dorothy Wu

DW
September 11, 2003

ANDREW CHRISTENSEN
SUPERVISORY PATENT EXAMINER
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